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Date: **OCT 20 2017**
Symbol: ADESH: 17-077
LA-UR: 17-28506
Locates Action No.: N/A



Mr. John Kieling, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Settlement Agreement and Stipulated Final Order HWB-14-20, Exhibit F Summary Report, October 2017

Dear Mr. Kieling:

This Exhibit F Summary Report is submitted in accordance with Paragraph 35 of the Settlement Agreement and Stipulated Final Order HWB-14-20 (SFO) entered into by the New Mexico Environment Department (NMED) (Complainant) and the U.S. Department of Energy (DOE) and Los Alamos National Security, LLC (LANS) (Respondents) on January 22, 2016. Paragraph 35 of the SFO requires the Respondents to keep NMED apprised of progress made on the corrective actions specified in the SFO Attachment A on a monthly basis. The Summary Report was requested during a technical presentation provided to the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) team on September 7, 2017 and provides the Evidence of Completion for the Respondents final corrective action. The Respondents met with NMED-HWB personnel on September 27, 2017 and provided a navigated tour of the electronic documents on the LANL network, as requested. The presentation supplemented the summary provided as Enclosure 1 with a mock-up Exhibit F contract document development exercise.

The revisions to Exhibit F address corrective actions identified in the Settlement Agreement and Stipulated Final Order HWB-14-20 (SFO) Attachment A, dated January 22, 2016. The updated Exhibit F contains Parts I, II and III (otherwise referred to as Exhibits F0, F1 and F2) and as a server-based electronic document can be made available for NMED viewing upon request. As stated in the August Monthly Status Report (ADESH-17-068), upon delivery of the Exhibit F Summary Report all corrective actions contained




Mr. John E. Kieling
ADESH: 17-077

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within the SFO Attachment A are complete. Therefore, the Respondents propose to discontinue monthly status reporting in accordance with Paragraph 35 of the SFO. Respondents will continue to provide semi-annual reporting of policy document revisions under Ordered Action 9 of the SFO on January 22 and July 22 of each year, until otherwise directed.

If you have comments or questions regarding this submittal, please contact Mark P. Haagenstad (LANS) at (505) 665-2014 or Jordan Arnswald (NA-LA) at (505) 667-6764.

Sincerely,


Michael T. Brandt, DrPH, CIH
Associate Director

Sincerely,


William S. Goodrum
Manager

MTB/KDL/MPH/SDG: eim:am


Enclosure 1): Exhibit F Summary Report, October 2017

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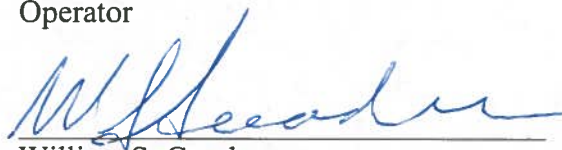
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CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Michael T. Brandt, DrPH, CIH
Associate Director
Environment, Safety, and Health
Los Alamos National Security, LLC
Los Alamos National Laboratory
Operator

10/12/17
Date Signed


William S. Goodrum
Manager
Los Alamos Field Office
U.S. Department of Energy
Owner/Operator

10/13/17
Date Signed

ENCLOSURE 1

Settlement Agreement and Stipulated Final Order HWB-14-20

Exhibit F Summary Report, October 2017

ADESH: 17-077

LA-UR-17-28506

Date: OCT 20 2017

Exhibit F Summary Report

October 2017

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Attachment 2	Procurements NewsFlash <i>Changes to P850 Subcontract Technical Representative</i> , PNF-186, November 7, 2016
Attachment 3	<i>Exhibit F for STR's, Slide 12</i> , September 26, 2017

1. Purpose

The purpose of this report is to provide a brief summary regarding the development and use of Exhibit F and changes implemented in response to the January 22, 2016 Settlement Agreement and Stipulated Final Order HWB-14-20, Attachment A, Item I.16.

2. Background

LANL Subcontracts are formal contractual agreements between the Laboratory and commercial service providers. Contracts are defined by a scope of work, and Environmental, Safety and Health, security and quality assurance contract clauses. The Environmental, Safety and Health (E, S, and H) clauses are contained in the LANL Exhibit F. The subcontract is administered by a procurement specialist and routine technical oversight is provided by an assigned Subcontract Technical Representative (STR). The following sections provide an overview of the Exhibit F development and application and provide an overview of the revision history and improvements made to Exhibit F. The Permittees have provided this summary of Exhibit F and its changes. Exhibit F is an Environment, Health and Safety (E, S, and H) contract clause [template] document that has been changed to a scalable online document specific to the scope of work being contracted. In meetings with NMED, held on September 7th and 27th 2017, both parties agreed that a summary of changes would be sufficient to demonstrate compliance with the Settlement Agreement requirement.

3. Summary

3.1 Revision History:

While the Exhibit F safety clauses have been included in all applicable LANL subcontracts since 2006; the initial E, S and H clause language was standard contractual language and was not tailored to the specific scope of work. The migration toward defined subcontractor staffing of Environmental Management or Waste Management positions began in late 2007 through the spring of 2011. Waste management and the associated clause, F39 – *Waste Management*, was created, and subsequently modified to reflect field operations active during that time frame.

Formal control of the Exhibit F document revision was limited from 2009 through 2016. Following the 2014 WIPP incident and subsequent Accident Investigation Board recommendations; revisions to Exhibit F were initiated in 2015. After extensive beta testing of the electronic requestors document in 2017, fully functional forms became available online [within the LANS “yellow” network] on July 28, 2017. Much of the current Exhibit F effort has been to establish and formalize document control processes and mechanisms for the document and its clauses. The current documents have been stream-lined to simplify work hazard categorization, thus reducing the possibility of assigning a lower potential work hazard than might be encountered during work evolution. In addition, the Exhibit F checklist and resulting contract clauses were focused to remove unnecessary/or not-applicable requirements, therefore clarifying the document for potential subcontractors.

Associated guidance to better define the roles and responsibilities of the STRs were developed to support the LANL project managers. The STR’s role in the Exhibit F development process and oversight of subcontractor work has been expanded to include signature authority on Exhibit F, formal STR

qualification standards, formalized assignment of and/or release of an assigned STR and formalized technical oversight requirements. The STR's role is better defined and implemented more consistently as a result of these changes.

As a result of both internal and external evaluations, Acquisition Services Management (ASM) Division and Purchasing, the Associate Director for Environmental Safety and Health, and project groups supported the re-development and revision of Exhibit F. Improvements have been made to the Exhibit F portal and the interface portals between the procurement requestor (e.g., LANL Project Manager), the ASM Procurement Specialist and the STR. R

3.2 Summary of Changes:

Strict document control of Exhibit F content was in place when the updated system became available on July 28, 2017. The online fillable Adobe LiveCycle format ensures consistency in Requestor checklist use. Prior to the online system the level of confidence that the Requestor had used the current Exhibit F file set was limited. Use of the online fillable Adobe LiveCycle format checklist and automated population of the relevant clauses ensures consistency. Exhibit F and the associated requirements, clauses and forms is controlled by dedicated LANL staff in a formal system.

Use of the updated fillable Adobe LiveCycle format allows the tailoring of the resulting Exhibit F to remove unnecessary/not-applicable clauses. This process has resulted in greatly clarified contract documents by making the documents specific to the work being performed.

Clearly defined STR roles, responsibilities and associated requirements are seen in the revised Exhibit F and detailed in the updated P850 documents. The STR position was established by 2012 but revisions in 2016 strengthened the position requirements and clearly defined their roles. The following summarizes the improvements noted in the 2016 revision of P850:

- Formalized STR appointment (e.g., training requirements, assignment notification process, etc.).
- Formalized succession of assigned STR, e.g., assignment process, roles and responsibilities of an alternate or support STR for large projects or in the event of the primary STR absence. The process is applicable in both temporary and permanent assignment changes.
- Formalized requirements (standardized template) for the Subcontractor Oversight Plan.
- Formalized audit of the STR Subcontract files on quarterly basis.
- Expanded STR role to include signature authority on the Exhibit F, and formalized technical oversight requirements
- Formalized requirement for Directorate level (Deputy Associate Directors [DADs]) review and approval of contract [directed] change orders.

Enhancements to Exhibit F and associated guidance provide a higher level of consistency in hazard grading and documentation. Communication of these changes are provided to the LANL Requestor and STR community through various online avenues, including the Exhibit F Portal, ASM Requestor Toolbox, STR Website, ASM Acquisition Guides and Acquisition Practice Guidance, and the Exhibit F Training Guide. A copy of the November 2015 Exhibit F Training Guide is provided in Attachment A. The 2015 Training Guide is currently being revised to update the contents to reflect the consolidation of the Moderate and High Hazard Exhibit F documents and to reflect the increase in the number of review and

approval signatures required. The 2015 Training Guide provides a detailed description of the processes described in this summary, minus the changes noted above. An updated copy of the Training Guide may be made available upon NMED request. The LANS ASM group publishes a periodic, internal *Procurement NewsFlash* update. A copy of the *Procurement NewsFlash* PNF-186 issued November 7, 2016 reflecting the revision of P850 (revision 5 was effective October 3, 2016) is provided in Attachment B of this submittal. Attachment C provides a copy of presentation slide 12 of the *Exhibit F for STR's* presentation discussed with NMED HWB staff on September 27 during the navigated tour of Exhibit F, as requested.

Attachment A

***An Introduction to Preparing Exhibit F Environmental, Safety & Health Requirements for
Subcontractors, Los Alamos National Laboratory, November 2015***

LA-UR-16-21611

Approved for public release; distribution is unlimited.

Title: An Introduction to Preparing Exhibit F Environmental, Safety & Health Requirements for Subcontractors

Author(s): Davis, Clay M.

Intended for: Guide for Subcontractors
Web

Issued: 2016-03-11

An Introduction to Preparing Exhibit F Environmental, Safety & Health Requirements for Subcontractors

Los Alamos National Laboratory
November 2015



Guidance for Preparing Exhibit F

An Introduction to Preparing Exhibit F Environmental, Safety & Health Requirements for Subcontractors

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Introduction

This guide assists Los Alamos National Laboratory (LANL) Administrative Subcontractor Technical Representative (AdSTR), Subcontractor Technical Representative (STR) ADESH and Procurement Specialists (PS) in determining which Exhibit F is appropriate for proposed Subcontracted work. Procurement Specialists are not responsible for filling out Exhibit F; however they are responsible for making sure the Exhibit F is appropriate for the subcontracted work being proposed and making sure it is complete with appropriate signatures. Therefore, reviewing this guide will help the PS to be in compliance with the Exhibit F policy. The purpose of Exhibit F is to communicate LANL specific Environmental, Safety and Health (ES&H) and applicable environmental permit requirements to potential Subcontractors. LANL Subcontractors are required to comply with LANL's 10 CFR 851, 10 CFR 850, and 10 CFR 835 compliant programs and all applicable Environmental laws and permits.

The Associate Director for Environmental, Safety, and Health (ADESH) representative and the AdSTR or STR will work together using the Statement of Work (SOW) to determine which Exhibit F will be used for a specific Subcontract.

There are currently four versions of Exhibit F:

- Construction / High Hazard
- Moderate Hazard Facility Equipment Installation, Maintenance and Repair
- Moderate Hazard Programmatic Equipment Installation, Maintenance, and Warranty Work
- Low Hazard Work.

Based on the hazards and risks of the work described in the SOW the correct version of Exhibit F is selected.

Exhibit F consists of a fillable checklist that invokes certain ES&H contract clauses appropriate to the hazards presented by the type of work being performed. Exhibit F clauses are revision controlled and must not be changed or modified outside the controlled revision process. Each Exhibit F also contains a set of clauses that are always applicable to the hazard / risk level.

Using a Graded Approach

LANL uses a graded approach for its Subcontractor ES&H requirements. Projects with Few potential hazards will have fewer requirements; likewise, projects with higher potential hazards will have more requirements.

The goal in using this approach is efficient implementation of ES&H requirements, applying only the necessary type and number of requirements needed. Avoiding needless requirements reduces costs while ensuring that work is accomplished in a safe, secure, and compliant way.

The chart below shows an outline of LANL's graded approach for high hazard, moderate hazard, and low hazard work. The types of requirements are proportional to the level of hazard, as discussed in more detail later in this guide.

Example of the Graded Approach for ES&H Requirements

	Work Examples	Exhibit F
<u>Low Hazard Examples</u>	<p>Installation or maintenance of equipment and deliveries, where there is no electrical hazards, work in radiological or other hazardous areas, or work with chemicals or physical hazards to workers or others working nearby</p> <ul style="list-style-type: none"> ▪ Onsite escorted inspections with no hands-on work ▪ Onsite meetings in classrooms ▪ Office work in regular offices, such as: <ul style="list-style-type: none"> – Software installation – Common equipment / materials delivery – Common office plug control equipment maintenance 	Low-Hazard Exhibit F
<u>Moderate Hazard Examples</u>	<ul style="list-style-type: none"> ▪ Installation or maintenance of equipment used for programs that may have potential hazards, such as laser maintenance ▪ Installation or maintenance of equipment used in OR for the maintenance of facilities that may have potential hazards, such as roofing repair, boiler maintenance, HVAC, compressed air systems, or electrical work <600V AC. ▪ Work at Multiple Institutional Sites (food service, custodial, etc.) ▪ Moderate risk & moderate consequence work per P300 	Programmatic or Facility Moderate Hazard Exhibit F
<u>High Hazard Examples</u>	<ul style="list-style-type: none"> ▪ Construction work, where there are potential physical or chemical hazards, including electrical work, confined spaces, elevated noise, etc., or where there are potential environmental issues such as storm water discharges or hazardous waste generation. ▪ Any work that takes place in radiological or other high hazard areas, such as: <ul style="list-style-type: none"> – D&D – Hazardous or Mixed Waste Processing – High risk & high consequence work per P300 	High Hazard Exhibit F

Overview to Using the Graded Approach

The following provides an overview of the steps you will take to identify and complete the appropriate Exhibit F for a project, using the Graded Approach as described above.

Step 1: Review Statement of Work

First, conduct a review the SOW, which should include the following:

- The nature of the work that will take place, including enough details relating to the type of work being performed so that potential hazards are identified. If there isn't enough detail in the SOW to identify hazards from the work and location, then it is the AdSTR / STR's responsibility to obtain additional details. Ensure a review by ESH disciplines appropriate to the work and location hazards (examples: construction safety, industrial hygiene, radiation protection, environment, etc.), is conducted. If you need help do not hesitate to consult with your Deployed ES&H Manager or OSH Core Program Leaders.
- Maintain a questioning attitude while reviewing a SOW. Ask questions of the requester and others that are familiar with the type of work being proposed. Some SOWs will clearly define the work, location, equipment and tools necessary, etc. while others may be written in the most general terms. If in doubt, ask the preparer of the SOW or the requester.
- Examine the proposed work for anticipated hazards. For example, renovating an existing building or laboratory could involve hoisting & rigging, heavy equipment, excavation, paint and solvent use (and subsequent wastes). Facility maintenance work may involve chemicals, refrigerants, pressure systems, hazardous energy control, or be conducted in hazardous areas (Beryllium, radiation, contamination, etc.).
- In situations where Programmatic Equipment installation and/or repair services are being sought become familiar with the type of equipment involved. Best source of information will generally be the requester. A check of the manufacturer's web site can give a wealth of information concerning built in lasers, high vacuum components, electrical requirements etc.

Step 2: Determine Type of Exhibit F to Use

After reviewing the SOW, you will determine the type of Exhibit F to use. As shown in the Graded Approach table, there are three broad categories that define the level of hazard for a project:

- **Low Hazard**
- **Moderate Hazard**
 - Programmatic Equipment Installation, Maintenance, and Warranty Work (Moderate Hazard Programmatic)
 - Facility Equipment Installation, Inspection, Maintenance, and Repair (Moderate Hazard Facility)
- **High Hazard Work / Construction, Environmental, Drilling, and D&D (High Hazard)**

The following factors determine what type of Exhibit F should be used:

- Risk of adverse safety, health, or environmental events or consequences to the Laboratory posed by the risk inherent to the work being done. For example, does the work involve electrical work and or electrical testing, lock out / tag out of hazardous energy, critical lifting, excavation, penetrations, confined space work, hazardous chemicals or carcinogens?
- Will the work generate radioactive, transuranic, hazardous or special wastes?
- Complexity of the work: for example, is this work being executed by a single Subcontractor or is the work part of a larger project requiring multiple Subcontractors or Subcontractors plus LANL workers?
- Business complexity: Does the subcontracted work require a high degree of oversight from Engineering, Quality, and/or ES&H to be successful? Are progress payments or fee tied to milestones involved?
- Is the work being conducted across multiple FODs or workplaces within a single FOD?

Basic answers to questions such as the above will drive the selection of Exhibit F as well as the degree of Subcontract management expertise required to successfully and safely deliver the final work product the Laboratory desires. Review the scenarios below to see an example of how the different types of exhibits may be used:

- Work that involves a Subcontractor working (other than in a direct oversight / directing role with no Subcontractor hands on work) with LANL Craft to maintain a complex facility machine, structure, or system is at a minimum **Moderate Hazard Facility Exhibit F work**.
- Work that involves a Subcontractor working hands-on to install a Programmatic stand alone instrument or machine that requires no concurrent LANL Craft work, hard interconnection to LANL systems or utilities (ex. plug controlled), or anchoring may be **Moderate Hazard Programmatic Work**.
- Any work involving energized electrical work, work near energized parts (other than low hazard electrical work per P101-13 Electrical Safety Program) or partially energized high or medium voltage systems, equipment, or where an arc flash hazard will be present will be **High Hazard Work**.
- Work involving troubleshooting, electrical diagnostics and testing, of Programmatic or Facility equipment may be **Moderate Hazard Work (Programmatic or Facility)**.
- Work involving maintenance, repair or warrantee work on business machines (copiers, printers, etc.) that are plug controlled may be **Low Hazard Work**.
- Work involving maintenance, repair, or warrantee work on scientific instruments that require no hazardous materials, radiation sources (or that is not radiation generating machine) may be **Moderate Hazard Programmatic Work**.

A description of each Exhibit F and a few general examples of the use of each are summarized in the table below.

Types of Exhibit F and Example Use


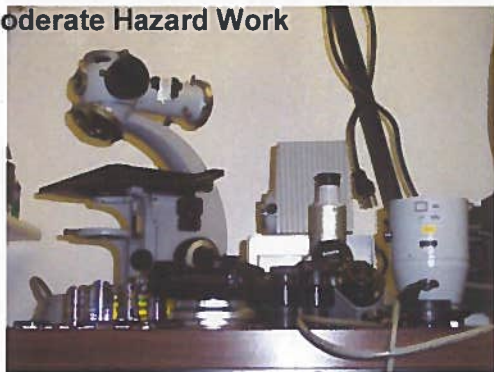
Exhibit F Name	When to Use
<p>Exhibit F for High Hazard Work: Construction, Environmental Restoration, D&D, ...</p> 	<p>Construction means the combination of erection, installation, assembly, demolition, or fabrication activities involved to create a new facility or to alter, add to, rehabilitate, dismantle or remove an existing facility. It also includes the alteration and repair (including dredging, excavating, and painting) of buildings, structures, or other real property, as well as any construction, demolition, and excavation activities conducted as part of environmental restoration or remediation efforts.</p> <p>Examples of projects covered include:</p> <ul style="list-style-type: none"> ▪ Greenfield construction ▪ Major facility modifications or repair ▪ Demolition ▪ Drilling wells or cores; ▪ Large / Broad Scope Multi-task Order Agreements <ul style="list-style-type: none"> • Unique first of a kind high risk scope of work • Hazardous waste management, transportation, or disposal operations
<p>Exhibit F for Programmatic Equipment Installation, Maintenance, and Repair: Moderate Hazard Work</p> 	<p>For work where there will be installation, maintenance, warrantee service, or repair specialized scientific equipment used for programs. Examples include maintenance or repair of equipment such as lasers, microscopes or specialized equipment where hazards are narrowly limited and controlled.</p> <p>This includes the following:</p> <ul style="list-style-type: none"> • Performance of preventive, warrantee, or corrective maintenance • Assembly or installation of equipment • Inspection, operation, tuning, and testing • Diagnosis and repair of problems. <p>Examples of equipment covered include:</p> <ul style="list-style-type: none"> • Mass Spectrometers • Light and electron microscopes • Small accelerators and light sources (Linac, cyclotron, etc.) • Special computing equipment • Lasers; and • Specialized, unique, research equipment.



Exhibit F Name	When to Use
<p>Exhibit F for Facility Equipment Installation, Maintenance and Repair: Moderate Hazard Work</p> 	<p>For work where there will be installation, maintenance, or repair of equipment used in the maintenance or services of facilities.</p> <p>Examples of work covered include the inspection, testing, or maintenance of the following:</p> <ul style="list-style-type: none"> • Boilers; • Elevators; • Fire Protection Systems; and • Lightning Protection Systems. <p>Other examples of work include the installation, maintenance or repair of:</p> <ul style="list-style-type: none"> • HVAC Systems; and • Electrical Systems • Compressed Air Systems <p>For work that occurs at several locations and that is not included in Construction.</p> <p>Examples of work include:</p> <ul style="list-style-type: none"> ▪ Food Service; ▪ Custodial Services; ▪ Communications systems, wiring; and ▪ Office and Cubicle Farm Installation.

Exhibit F Name	When to Use
<p>Exhibit F for Environmental, Safety and Health Requirements for Low Hazard Work</p> 	<p>For work that is not anticipated to present any hazards to workers or bystanders. Further stipulations include:</p> <ul style="list-style-type: none"> ▪ Chemicals will not be used or be present in the work area and no hazardous wastes will be generated ▪ Work <u>will NOT</u> take place in a radiological area ▪ Work <u>CAN</u> take place at multiple sites ▪ No electrical work is involved, except plugging or unplugging of equipment into electrical receptacles. No Lock Out/Tag Out or other hazardous energy control is required is required. ▪ NO penetrations; and ▪ NO uncontrolled hazards to workers or bystanders <p>Examples of work covered include:</p> <ul style="list-style-type: none"> ▪ Common material or equipment deliveries/pickups by suppliers such as laundry, snacks, or compressed gas cylinders ▪ Computer hardware/software maintenance ▪ On-site inspections, assessment of activities/facilities limited to escorted walkthrough with no hands-on work, such as compliance inspections (w/o special training / PPE) ▪ On-site training professional consultations etc

Step 3: Complete the Appropriate Exhibit F Checklist

Once you have selected the appropriate Exhibit F to use, you will note that it has a checklist associated with it for you to complete. This checklist invokes clauses that specifically address controls the Laboratory requires for the identified hazards and risks. As noted in the Introduction, the actual Exhibit F is a controlled document and the selection of risks / hazards / controls is the extent to which Exhibit F may be tailored to a particular scope of work. Any other tailoring needs not addressed adequately in the checklist process should be discussed with a STR or Procurement Specialist (PS). Sometimes, minor changes or additions to either the SOW or Special Conditions in the proposed subcontract can be used to adjust requirements.

The checklist contains a set of general requirements that are applicable to the type of work being performed. It also contains a set of questions to be answered by the AdSTR / STR and the ADESH Representative based on the scope of work to be performed by the Subcontractor. For any questions that are answered yes, the referenced clause applies and is made part of the subcontract.

As much as it is possible, it is important to identify the location where the work will take place. If it is known, the Technical Area(s), Building(s), and Room Number(s), and the Facility Operations Directorate(s) (FOD) within LANL where the work will occur should be identified. It is also important to identify the time period the work will be executed within. It is also important to identify and enter on the Form 2101 (contained within the Moderate and High Hazard Exhibit F) and any known work area specific hazards or special entry requirements. This form should be completed by the FOD with an ADESH Exhibit F Point of Contact or other ADESH representatives providing subject matter expertise as needed.

Note that this information is particularly important for bidders to be able to accurately price their submissions as well as to understand some of the Exhibit F requirements. By reducing misunderstanding at the bid phase of the Subcontract cycle a host of problems can be avoided such as requests for equitable adjustment due to site conditions / requirements being other than stated, change orders, and extras. This keeps costs and schedule delays at a minimum.

To complete the checklist properly, you will first have to identify potential hazards that can be associated with the project.

There are two primary sources of potential hazards that can be associated with a Subcontract:

1. **Work Area Hazards:** As mentioned above, the first source of potential hazards is the location of the work area. For example, if the work involves electrical maintenance that will be performed in a work area within LANL that has asbestos-containing material, then even if asbestos abatement is not the primary purpose of the work, the Subcontractor must have asbestos awareness training and must not perform any maintenance or other work (as defined by 29 CFR 1910.1001) that could potentially disturb or release asbestos fibers. It is important that worksite hazards are identified to ensure that the Subcontractor knows of and utilizes appropriate controls.

2. **Work / Task-Specific Hazards (AKA: Job Specific Hazards):** The second source of potential hazards is the type of work being performed. The SOW provides some insight depending on the level of detail to which the SOW is prepared. Construction, renovation, and large-scale equipment installation jobs will generally have a more richly detailed SOW. If you are unfamiliar with the tasks or do not understand in at least general terms the work being proposed get help before attempting to evaluate the job-specific hazards. It is very important that you have at least a general understanding of:

- The elements and sequence of the work
- Tools, equipment, and workers that will be used
- Materials, chemicals, and processes (e.g. Welding, cutting, excavating, steel erection, pipefitting, etc.) that will go into completing the work
- Waste that will be generated and who is responsible for their management and disposal.
- Environmental and permit needs / impacts

For example, if the work involves energized electrical work or work in proximity to exposed energized parts, even though it takes place in an area without other electrical hazards, the Subcontractor must have Section 36.0 Electrical Safety and other applicable sections in their Exhibit F and their Site Specific ES&H Plan (when required). Note that both the location of work and type of work can be the source of the same type or class of hazard. The LANL AdSTR / STR /Requester and the ADESH Representative together will be key in assessing and in identifying hazards that the Subcontractor must address.

To capture the spectrum of the hazards, you must review both the location, nature, and scope of the work.

For any questions that have been answered yes, the referenced clause applies and is made part of the Subcontract. Some of the questions, if answered yes, require the submittal of a program or plan by the Subcontractor, which must be reviewed and approved by the STR and the ADESH Representative.

Step 4: Signatures and Routing of Exhibit F

Exhibit F is now designed for digital signatures using Adobe Acrobat with an Entrust certificate. This speeds the approval flow and avoids hand carry of paperwork to obtain signatures. If you will be signing Exhibit F's you need Entrust to provide the validation necessary for digital signature. Only in rare cases should Exhibit F be routed for "wet ink" signatures.

Who Signs Exhibit F and What Does it Mean?

For High Hazard and Moderate Hazard Facility Exhibit F the pre-RFP/RFQ required minimum signatures are:

- Subcontract Technical Representative
- Environmental Safety & Health Representatives (as indicated by the analysis of the SOW)
 - Safety Representative
 - IH Representative
 - Radiation Protection Representative
 - Deployed Environmental Professional (ENV Representative)

Note: where a representative's signature is not required as indicated by the analysis of the SOW an "NA" with the initials of the individual inserting the NA is placed on that line.

For Moderate Hazard Programmatic Equipment Installation, Maintenance, and Repair the minimum signatures are:

- AdSTR / Responsible Line Manager
- LANL ES&H Representative (usually the Deployed ES&H Manager, Exhibit F Point of Contact, for the FOD in which the equipment will be installed, maintained or

repaired. In cases of Laboratory wide scope or more than 2 FOD areas the Exhibit F Office will coordinate and provide Institutional Signature)

- Deployed Environmental Professional (ENV Representative)
- Responsible Line Manager or Designee acknowledgement of roles & responsibilities

For Low Hazard Exhibit F the minimum signatures are:

- AdSTR
- ADESH Representative (usually the Deployed ES&H Manager or ADESH Exhibit F Point of Contact for the FOD in which the work will be executed)
 - Radiation Protection Lead (if the work is being conducted in a radiological controlled area)
 - Deployed Environmental Professional (ENV Representative)
- Responsible Line Manager (if the work involves low hazard electrical work)

Exhibit F for Moderate Facility and High Hazard is generally first signed off by the ES&H signatories and signed and locked by the STR as a final step. With Programmatic Moderate and Low Hazard the AdSTR and RLM (only if applicable on Low Hazard) will sign first then route it to the ADESH POC for review and ES&H signatures. The final ES&H signatory then signs and locks the Exhibit F and routes it back to the AdSTR for final transmission to the Procurement Specialist.

What Does Your Signature Mean?

The ES&H and DEP signatures indicate:

- Review of the SOW and appropriate selections in the checklist using best available knowledge
- Work location hazards have been addressed in the 2101 (if applicable)
- Concurrence (not Approval) that the Exhibit F conforms to the SOW to the extent that information is available and understanding of the SOW.

The STR signature indicates:

- The Exhibit F is complete and adequate for Procurement purposes
- Concurrence that the Exhibit F is appropriate to the SOW to the limit of their understanding of the requested work and the Procurement Process

An AdSTR signature indicates:

- Acknowledgement that they will execute the Roles and Responsibility of AdSTR including coordination with the FOD Plan Of the Day or Plan Of the Week process
- Acknowledgement that they will coordinate the Subcontracted work with the appropriate Deployed ES&H Manager for ES&H oversight.

Step 5: Award, Execution, and Due Diligence

The completed Exhibit F is combined with the SOW as well as other exhibits such as Security and Quality to form a package. It is this package that is sent out to vendors, suppliers, and/or other businesses to show LANL's interest in purchasing goods, services, or material. Businesses then base price quotes or proposals on the SOW and their cost to meet DOE, OSHA, and LANL ES&H requirements as stated in the Exhibit F.

As part of the bid review process the ES&H POC or ADESH POC who signed off on the Exhibit F may be asked to evaluate the safety & environmental performance of the short listed bidders or the lowest cost responsive bidder. The Safety Performance Eligibility Requirements are found in Moderate or High Hazard Exhibit F Attachment F3-1. In cases where there is a question concerning a bidder's eligibility the reviewer should contact the Exhibit F Office Leader for guidance. Once these reviews are completed then ASM can proceed to award a contract. As stated in Step 3 if the Exhibit F has called for the successful bidder to supply a Site Specific ES&H Plan (SSESHP) the ES&H POC or ADESH POC that signed the Exhibit F may be asked by the STR to review the Site Specific ES&H Plan of the to verify that it meets the requirements of the Exhibit F and to make comment where deficiency or improvements are required prior to Notice to Proceed (NTP). In some rare cases all responsive bidders may be required to submit a SSESHP as part of their bid and the quality of the proposed ES&H Programs defined in the SSESHP can become part of the selection process. If you are involved in a procurement of this type contact the Exhibit F Office for assistance.

Providing Oversight: Due Diligence Expectations

Oversight of Subcontractor work is a requirement from several different aspects. These include business and financial, safety, industrial hygiene, environmental, waste management, permit processes, and facility coordination. For ES&H oversight assures that the Subcontractor is performing in accordance with the Exhibit F requirement, facility requirements, and LANL environmental permits and requirements. The STR and AdSTR coordinate with the appropriate Deployed ESH Manager(s) to provide the required ES&H oversight. From the ES&H standpoint:

DSESH group leaders

- Coordinates with AdSTRs and STRs managing work in their areas of responsibility
- Review the Subcontractor work schedule for their FOD (done at least weekly)
- Assign oversight responsibilities to one or more ESH professionals
- Retains completed checklists in accordance with ADESH Standing Order ADESH-SO-004.0 *Subcontractor DESH Oversight*

Deployed ESH Professionals

- Construction and High Hazard / High Risk Exhibit F work generally have DSESH-ADPM construction safety, Environmental, and IH staff assigned who utilize a construction related process to document and record findings.

- All Other Moderate and low risk exhibit F work is provided oversight by the FOD DSESH personnel.
- Make any necessary arrangements with the STR to perform oversight
- Obtain and review a copy of the applicable Exhibit F
- Oversee the Subcontractor's work activity and work execution
- Document oversight results on the checklist attached to ADESH Standing Order ADESH-SO-004.0 *Subcontractor DESH Oversight*
- Notify the STR of issues identified during the review
- Notify the DSESH group leader of any significant issues identified during the review

Exhibit F program owner

- Coordinates hazard review and formation of large scope (across the Lab), complex, or unusually hazardous SOW and subsequent Exhibit F development.
- Works with Exhibit F POCs and DEPs as a resource
- Works with STRs, AdSTRs, PSs, and Requestors as a resource
- Reviews oversight data
- Provides a feedback and results to DSESH Division Leader and ISM Program Manager

Attachment B

Procurements NewsFlash *Changes to P850 Subcontract Technical Representative*, PNF-186

November 7, 2016

LANS

Procurement NewsFlash

TO: Procurement Staff

FROM: ASM-AO / William G. Pyle

SUBJECT: PNF 186 – Subcontract Technical Representative Procedure Changes

CHANGES TO P850 SUBCONTRACT TECHNICAL REPRESENTATIVE PROCEDURE

Another revision (Rev. 6) was recently made to P850, *Subcontract Technical Representative Procedure*, to correct clerical errors, clarify process and reduce requirements. Many questions have arisen since P850 Rev. 5 became effective on October 3, 2016. Hopefully, those questions will be answered with the information shown below. If you still have questions, please contact John at 667-9240 or jmroybal@lanl.gov.

- An AdSTR or STR must be appointed to all subcontracts for on-site work whenever the subcontract contains Exhibit D, E, F, G, H and/or I. **Note:** The PS enters the AdSTR/STR name in the Requester Name field so that the invoice(s) will be sent to the AdSTR/STR.
- An AdSTR may only oversee low hazard work. STRs may oversee low, moderate and high hazard work.
- To be qualified as an AdSTR under P850 minimum training requirements, an individual must take and pass Utrain on-line course 34421, *P850 AdSTR Initial Training*.
- To be qualified as an STR under P850 minimum training requirements, an individual must take and pass Utrain live course 33757, *P850 STR Initial Training*, as well as the following:

Who	Title	U Train Course No.	Frequency
STR	Exhibit F ES&H Briefing for STRs	33699	Once
STR	Exhibit G Physical Security STR Briefing	33744	Once
STR	Exhibit G Cyber Security STR Briefing	33771	Once
STR	P840-1 Quality Assurance for Procurements	46233	Once
STR	P850 Subcontract Technical Representative Procedure (Required Reading)	33770	Once

Note: Additional qualification requirements for subcontract technical representatives may be found in Implementing Documents.

- For subcontracts awarded after 10/3/16, to be able to act as either an AdSTR or STR and perform technical oversight of a subcontract, an individual who is qualified must be

appointed through a *Subcontract Technical Representative Electronic Appointment Memo* (LANL Form 1989).

- All requisition packages must include Form 1989 for both AdSTRs and STRs. In addition, if the work is moderate or high hazard, an email from STRassignment@lanl.gov documenting review of the statement of work by the Institutional Designating Authority screening committee must also be part of the package. These documents are to be placed in your procurement file in Tab 17.
- The qualification (i.e., training) requirements listed above for new AdSTRs and STRs also apply to individuals who were acting as AdSTRs/STRs on existing subcontracts (i.e., subcontracts issued prior to 10/3/16). Those individuals have until 12/2/16 to become qualified. On 12/5/16, the PS should check the lists of qualified AdSTRs and STRs to see if those individuals have qualified. If they have not qualified by 12/5/16, send an email to John M Roybal with the subcontract number, name and Z number of the AdSTR/STR who did not qualify. **Note:** Individuals who requalify do not need new appointment memos, since they were appointed under the prior version of P850.
- If an AdSTR/STR is changed on a subcontract:
 - Exhibits F, G and H do not need to be revised (i.e., signed by the new AdSTR/STR);
 - A completed LANL Form 1989 must be received and placed in the procurement file;
 - Special Condition SC-2 *Authority of Personnel* must be revised to show the new AdSTR/STR; and
 - The Requester Name field in Oracle must be revised to show the new AdSTR/STR.
- Lists of AdSTRs and STRs who are qualified to the minimum requirements in P850 may be found at the Subcontract Technical Representative Program (AdSTR/STR) web site located at <http://int.lanl.gov/services/procurement/subcontract-technical-representative/index.shtml>.

DURING THE ADMINISTRATION PHASE OF A SUBCONTRACT:

- The PS shall send the AdSTR/STR pdf copies of the executed subcontract and all executed modifications as soon as those documents have been signed by the parties.
- The PS shall send the AdSTR/STR, the appropriate technical evaluation form to use to document technical evaluation of proposal(s). **Note:** There are now several evaluation forms available.
- If a subcontractor's interpretation of subcontract terms and conditions differs from LANS', the AdSTR/STR will notify the PS of the issue and will work with the PS to attempt to resolve the issue in a timely manner. If resolution of the issue may take time, the PS may provide immediate direction to the subcontractor to avoid impact to schedule. Once the issue is resolved, if a change to the subcontract is necessary, the PS issues a bilateral modification.

- If a subcontractor fails to comply with the terms and conditions specified in the subcontract, the AdSTR/STR will immediately notify the subcontractor and PS, via email, of such non-compliance. If the subcontractor does not correct the non-compliance, the STR will notify the PS via email so that the PS can take appropriate action.
- At subcontract closeout, the AdSTR/STR will send (either electronically or in hardcopy) their Subcontract Field File (SFF) to the PS. The PS shall include the SFF in the procurement file under Tab 701.

Attachment C

Exhibit F for STR's, Presentation Slide 12

September 26, 2017



Exhibit F for STR's

Preparation, Execution, Authorities, Responsibilities

26 SEP 17

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How is Consequence Level Determined?

- The Requestor in consultation with Deployed ES&H and ES&H SMEs as needed, determine the Consequence Level of a Scope of Work prior to it being written into an Exhibit D.
 - P300 Integrated Work Management Attachment B Hazard Grading Table Should be reviewed
 - Persons Knowledgeable of the Work Methods, Hazards, Facility Hazards, Collocated Hazards, **Must** Be Consulted

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